

## ABSTRACT

“Method for efficient equalization in a telecommunication system including at least one mobile transceiver”

The present invention relates to a method for transmitting data  $D_i$  in a telecommunication system SYST including a first transceiver  $TX_i$  and a second transceiver RX linked together by means of a communication channel  $Chi$ , one of which transceivers being mobile, which method includes:

- . a spreading step for spreading said data  $D_i$  over a plurality of components  $C_{tj}$  (for  $j=1$  to  $M$ ), and
- . an equalization step during which each component  $C_{tj}$  (for  $j=1$  to  $M$ ) is multiplied by an equalization value  $W_i(j)^*$  representative of communication conditions within the communication channel  $Chi$ .

According to the invention, the equalization values  $W_i(j)^*$  are also representative of a Doppler effect generated by movement of the mobile transceiver.

The invention enables to significantly compensate for alterations caused to the communication channel  $Chi$  by movement of the mobile transceiver.

Fig.1